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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,027	07/09/2003	Osamu Hachuda	1509.1034	8731

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EXAMINER

NGUYEN, PHUONGCHI T

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental  
Notice of Allowability**

Application No.

10/615,027

Examiner

Phuongchi Nguyen

Applicant(s)

HACHUDA ET AL.

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Examiner's amendment (here to).
2. ☒ The allowed claim(s) is/are 1-11 and 13-19.
3. ☒ The drawings filed on 07 August 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.   |

Art Unit: 2833

### EXAMINERS AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Paula I Kravetz on August 22, 2005.

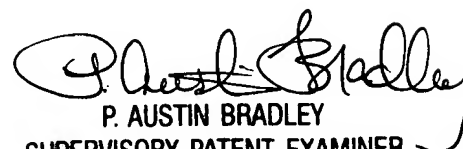
2. The application has been amended as follows: Please see the following pages 3-6.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PhuongChi Nguyen whose telephone number is (703) 305-0729. The examiner can normally be reach on Monday through Thursday from 8:AM to 4:30PM.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PCN August 25, 2005

  
P. AUSTIN BRADLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

1. (CURRENTLY AMENDED) A contact pin mounted to a socket body into which an electrical part is accommodated and adapted to electrically connect a terminal of the electrical part to a printed circuit board, said contact pin comprising:

a plunger electrically contacting the electrical part;

a bottom contact portion electrically connected to the printed circuit board; and

a spring urging the plunger and the bottom contact portion so as to separate from each other, ~~wherein~~

at least one of the plunger and the bottom contact portion is formed by press-working a plate member, and

one of the plunger and the bottom contact portion is provided with a connection portion to which the other one of the plunger and the bottom contact portion thereof is connected to be relatively movable.

2. (CURRENTLY AMENDED) The contact pin according to claim 1, wherein said other one of the plunger and the bottom contact portion is a-the plunger and having-has a rod-shaped portion which is formed to be relatively slidable with respect to the connection portion of the bottom contact portion.

3. (CURRENTLY AMENDED) The contact pin according to claim 1, wherein said one of the plunger and the bottom contact portion provided with a connection portion is a-the bottom contact portion having the connection portion of a tubular structure positioned on an upper side of the plunger, and the bottom contact portion has a lower contact portion contacting the printed circuit board having a center line in alignment with a center line of the plunger.

4. (ORIGINAL) The contact pin according to claim 1, wherein said other one of the plunger and the bottom contact portion has a portion projecting through the connection portion and a coming-off prevention portion is provided for the projecting portion.

5. (CURRENTLY AMENDED) The contact pin according to claim 1, wherein said one of the plunger and the bottom contact portion provided with a connection portion is the bottom contact portion, ~~provided with the connection portion and~~

said other one of the plunger and the bottom contact portion is the plunger and having has a flanged portion, and

said spring is disposed between the flanged portion of the plunger and the connection portion of the bottom contact portion.

6. (ORIGINAL) The contact pin according to claim 5, wherein at least one of the flanged portion and connection portion has an inclined surface to which the spring is contacted.

7. (ORIGINAL) A socket for an electrical part having a socket body to which the contact pin according to claim 1 is arranged, wherein said socket body has an upper portion to which a top plate is disposed and a lower portion to which a bottom plate is disposed, the plunger of the contact pin has a flanged portion which is inserted through the top plate to be vertically movable and the bottom contact portion is inserted through the bottom plate.

8. (ORIGINAL) The socket for an electrical part according to claim 7, wherein said plunger has an upper coming-off prevention portion which abuts against a lower surface of the top plate and said bottom contact portion has a lower coming-off prevention portion which abuts against an upper surface of the bottom plate to thereby restrict vertical movement of the contact pin.

9. (ORIGINAL) The socket for an electrical part according to claim 7, wherein a middle plate is further arranged between the top plate and the bottom plate, and the connection portion is inserted and guided through the middle plate so as to be vertically movable.

10. (ORIGINAL) The socket for an electrical part according to claim 9, wherein said bottom contact portion is formed with a connection portion, to which an engaging piece is formed so as to limit an upward movement of the bottom contact portion in engagement with a lower surface of the middle plate.

11. (PREVIOUSLY PRESENTED) A socket for an electrical part having a socket body to which the electrical part is accommodated and to which the contact pin according to claim 1 is arranged to electrically connect a terminal of the electrical part to a printed circuit board, said socket body is provided with a frame-shaped base member, a contact pin assembly, including the contact pin, mounted to be detachably thereto, and a lock means for securing the contact pin assembly to the base member, said lock means being operated from an upper side thereof.

12. (CANCELED)

13. (ORIGINAL) The socket for an electrical part according to claim 11, wherein said contact pin assembly includes top, middle and bottom plates disposed vertically, said bottom and middle plates being arranged with a predetermined distance, said top plate being disposed to be vertically movable with respect to said middle plate and being urged upward.

14. (ORIGINAL) The socket for an electrical part according to claim 13, wherein said middle plate is positioned in the vertical direction with respect to the base member.

15. (PREVIOUSLY PRESENTED) A socket for an electrical part having a socket body to which the electrical part is accommodated and to which the contact pin according to claim 1 is arranged to electrically connect a terminal of the electrical part to a printed circuit board, said socket body is provided with a frame-shaped base member, and a contact pin assembly, including the contact pin, mounted to be detachably thereto, said contact pin assembly being inserted, to be detachable, from an upper portion with respect to the base member.

16. (ORIGINAL) The socket for an electrical part according to claim 15, wherein said contact pin assembly is mounted to a predetermined position with respect to the printed circuit board and said base member is arranged to be horizontally adjustable in position with respect to the contact pin assembly.

17. (PREVIOUSLY PRESENTED) A socket for an electrical part for establishing an electrical connection between a terminal of the electrical part and a printed circuit board, comprising:

- a socket body to which a number of contact pins are arranged;

- a base member disposed to the socket body;

- a contact pin assembly provided with the contact pin and secured to the base member

by a lock means;

- an open/close member arranged to the base member to be rotatable; and

- an operation member operating the open/close member to be rotatable,

said contact pin assembly including a plurality of plates disposed vertically within a predetermined distance, and

said contact pin comprising a plunger electrically contacting the electric part, a bottom contact portion electrically connected to the printed circuit board, and a spring urging the plunger and the bottom contact portion so as to separate from each other, wherein at least one of the plunger and the bottom contact portion is formed by press-working a plate member, said bottom contact portion being provided with a connection portion to which the plunger is connected, and said plunger having a rod-shaped portion which is formed to be relatively slidable to the connection portion of the bottom contact portion.

18. (PREVIOUSLY PRESENTED) A socket for an electrical part having a socket body to which the electrical part is accommodated and to which a contact pin is arranged to electrically connect a terminal of the electrical part to a printed circuit board, said socket body is provided with a frame-shaped base member, a contact pin assembly, including the contact pin, mounted to be detachably thereto, and a lock means for securing the contact pin assembly to the base member, said lock means being operated from an upper side thereof,

wherein said contact pin assembly includes top, middle and bottom plates disposed vertically, said bottom and middle plates being arranged within a predetermined distance, said top plate being disposed to be vertically movable with respect to said middle plate and being urged upward.

19. (PREVIOUSLY PRESENTED) The socket for an electrical part according to claim 18, wherein said middle plate is positioned in the vertical direction with respect to the base member.